

## APPENDIX A

On page 7, beginning at line 1, paragraph no. 1:

The scrambled data is provided to a bank of mixers **14a-14n**. Each mixer is driven by a corresponding local oscillator **16a-16n**. The upconverted data from each of mixers **14a-14n** is provided to switch **18**. In the preferred embodiment, the local oscillator frequencies are equally separated in frequency, so that the frequency of the  $n^{\text{th}}$  LO is  $f_0 + N\Delta f_0$ . In the preferred embodiment, the local oscillator frequencies are separated by the chip rate of the PN generator or by some multiple thereof so that  $\Delta f_0$  is the chip rate or some multiple of the chip rate. Switch **18** selects which one of the upconverted signals is to provide to coupled to transmitter (TMTR) **20**. The upconverted signal that is provided to transmitter **20** is selected in accordance with a signal provided by control processor **22**. In the illustrated embodiment, control processor **22** generates the selection signal based on a pseudorandom process. The pseudorandom process can be generated using any one of many methods which are well known in the art for generating such sequences. For example, the pseudorandom sequence can be generated by a linear or non-linear feedback shift register. It may also be generated by a cryptographic keystream generator. Any of these techniques can use an identity of the mobile station, such as the electronic serial number (ESN), a public key, or a secret key. These techniques are well known in the art. In an alternative embodiment, the selection signal can be a sequential selection of the first, then second up to the  $n$ -th upconverted signal. In another alternative embodiment, the selected frequency may be based upon channel conditions. The receiving system may measure the performance of each channel and then feed the preferred frequency back to the transmitter for use. This may be done by monitoring a signal which is continuously transmitted, such as a pilot. The selected signal is provided to transmitter **20** which filters and amplifies the signal and provides it for transmission through antenna **24**. It should be understood that in the preferred embodiment of the present invention, at least one other signal similarly generated will be multiplexed together. Preferably, the number of such similarly generated signals will be equal to the number of mixer **14** and local oscillator **16** combinations. For example, in the case of the embodiment illustrated in Fig. 1, three such signals will be multiplexed and transmitted through transmitter **20**. Accordingly, data from three different sources (and

coupled to the transmitter from three different switches [20] 18, only one of which is shown) will be multiplexed together before transmission by the transmitter 20. Each switch 18 selects a mixer 14 that is coupled to a local oscillator 16 that is operating at a different frequency from the frequency of each of the other local oscillators 16 generating the signals that are being concurrently selected by each other switch 18.

On page 8, beginning at line 19, paragraph no. 3:

The scrambled data is provided to mixer 62. Mixer 62 is driven by variable frequency synthesizer 64. Variable frequency synthesizer 64 outputs a driving frequency to mixer 62 in accordance with a signal provided by control processor 70. In one embodiment, control processor 70 generates the frequency selection signal based on a pseudorandom process. In an alternative embodiment, the selection signal can be a sequential selection of the first, then second up to the n-th upconverted signal. The upconverted signal is provided to transmitter [20] 66 which filters and amplifies the signal and provides it for transmission through antenna [24] 68. Accordingly, in an embodiment in which the frequency synthesizer 64 generates three frequencies, a signal generated will have a first frequency for a first period of time, a second frequency for a second period of time, and a third frequency for a third period of time. This sequence will repeat, such that the frequency of the signal generated will alternate between the three frequencies over time.

On page 13, beginning at line 3, paragraph no. 1:

The scrambled data is provided to a bank of mixers **268a-268n**. Each mixer **268a-268n** is driven by a corresponding local oscillator **270a-270n**. The upconverted data from each mixer **268a-268n** is provided to switch 264. Switch 264 selects one of the upconverted signals to provide to transmitter (TMTR) 274. The upconverted signal that is provided to transmitter 274 is selected in accordance with the selection signal provided by control processor [264] 266.